

What is claimed is:

1. A multiple reflective mirrors module utilized in an optical engine, the multiple reflective mirrors module comprising:

5 a first tilting reflective mirror;

 a second tilting reflective mirror disposed opposite the first tilting reflective mirror, an incident light of the second tilting reflective mirror being reflected by the second tilting reflective mirror to form a first reflected light transmitted to the first tilting reflective mirror, wherein the first reflected light is formed with an angle variation $2\theta_1 + 2\theta_2$ when the first tilting reflective mirror rotates an angle θ_1 and the second tilting reflective mirror rotates an angle θ_2 ; and

10 a third tilting reflective mirror disposed opposite the first tilting reflective mirror, the first reflected light being reflected by the first tilting reflective mirror, transmitted to the third tilting reflective mirror, and then reflected by the third tilting reflective mirror to form a second reflected light, wherein the second reflected light is formed with an angle variation $2\theta_1 + 2\theta_2 + 2\theta_3$ when the third tilting reflective mirror rotates an angle θ_3 .

15 2. The multiple reflective mirrors module of claim 1, wherein the second tilting reflective mirror and the third tilting reflective mirror are formed on a same substrate.

20 3. The multiple reflective mirrors module of claim 2, wherein the angle θ_2 of the second tilting reflective mirror and the angle θ_3 of the third tilting reflective mirror are controlled by circuits constructed on the substrate.

4. The multiple reflective mirrors module of claim 2, wherein the substrate is a semiconductor substrate.

5. The multiple reflective mirrors module of claim 1, wherein the first tilting reflective mirror is a fixed reflective mirror.

6. The multiple reflective mirrors module of claim 1, wherein the first tilting reflective mirror is formed on another substrate and the angle θ_1 of the first tilting reflective mirror is controlled by circuits constructed on an other substrate.

10

7. The multiple reflective mirrors module of claim 6, wherein the other substrate is a semiconductor substrate.

15 8. The multiple reflective mirrors module of claim 1, wherein the first tilting reflective mirror, the second tilting reflective mirror and the third tilting reflective mirror have a same rotationally axial direction so that the second reflected light scans on a line segment.

20 9. The multiple reflective mirrors module of claim 1, wherein the first tilting reflective mirror, the second tilting reflective mirror and the third tilting reflective mirror have at least two rotationally axial directions so that the second reflected light scans on a surface.

25 10. The multiple reflective mirrors module of claim 1, wherein the optical engine is utilized in a projector to display images.

11. The multiple reflective mirrors module of claim 1, wherein the optical engine is utilized in a laser printer to reproduce images.

5 12. The multiple reflective mirrors module of claim 1, wherein the optical engine is utilized in a copy machine to reproduce images.

13. The multiple reflective mirrors module of claim 1, wherein the optical engine is utilized in a scanner to scan images.

10

14. A multiple reflective mirrors module utilized in an optical engine, the multiple reflective mirrors module comprising:

15 a fixed reflective mirror;
a first tilting reflective mirror disposed opposite the fixed reflective mirror, an incident light of the first tilting reflective mirror being reflected by the first tilting reflective mirror to form a first reflected light transmitted to the fixed reflective mirror, wherein the first reflected light is formed with an angle variation $2\theta_1$ when the first tilting reflective mirror rotates an angle θ_1 ; and

20 a second tilting reflective mirror disposed opposite the fixed reflective mirror, the first reflected light being reflected by the fixed reflective mirror, transmitted to the second tilting reflective mirror, and then reflected by the second tilting reflective mirror to form a second reflected light, wherein the second reflected light is formed with an angle variation $2\theta_1 + 2\theta_2$ when the second tilting reflective mirror rotates an angle θ_2 .

25

15. The multiple reflective mirrors module of claim 14, wherein the first tilting reflective mirror and the second tilting reflective mirror are formed on a same substrate.

5 16. The multiple reflective mirrors module of claim 15, wherein the angle θ_1 of the first tilting reflective mirror and the angle θ_2 of the second tilting reflective mirror are controlled by circuits constructed on the substrate.

10 17. The multiple reflective mirrors module of claim 15, wherein the substrate is a semiconductor substrate.

18. The multiple reflective mirrors module of claim 14, wherein the optical engine is utilized in a projector, a laser printer, a copy machine, or a scanner.

15 19. The multiple reflective mirrors module of claim 14, wherein the first tilting reflective mirror and the second tilting reflective mirror have a same rotationally axial direction so that the second reflected light scans on a line segment.

20 20. The multiple reflective mirrors module of claim 14, wherein the first tilting reflective mirror and the second tilting reflective mirror have respective rotationally axial directions so that the second reflected light scans on a surface.